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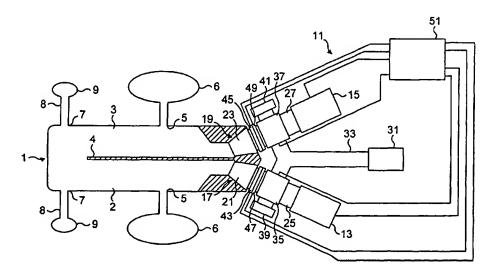
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(54) Title: NASAL DEVICES



(57) Abstract: A nasal delivery device (11) for delivering substance to a nasal airway (1) of a subject, comprising: first and second nosepiece units (17, 19), each including a nosepiece (21, 23) for fitting to respective nostrils of a subject; at least one substance supply unit (13, 15) for supplying substance for delivery to the nasal airway (1) of the subject; and a valve unit (35, 37) for selectively fluidly connecting the at least one substance supply unit (13, 15) alternately to respective ones of the nosepiece units (17, 19).

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CLASSIFICATION OF SUBJECT MATTER PC 7 A61M16/06 A61M IPC 7 Ã6ĨM15/08 A61M16/20 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 A61M Documentation searched other than minimum documentation to the extent that such documents are included. In the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to daim No. Category 9 Citation of document, with indication, where appropriate, of the relevant passages 1,3,5, X WO 01 78818 A (TRUDELL MEDICAL INTERNAT) 25 October 2001 (2001-10-25) 13,28 page 16, line 5 -page 17, line 24 15,37 Α WO 99 19013 A (VIRANYI PAUL) Α 22 April 1999 (1999-04-22) page 8, line 14 -page 9, line 8; figures 1,3 GB 408 856 A (HENRY FRANKEMOELLER; WIETSKE X 1-6. 41-47 VAN SETERS BOSCH) 19 April 1934 (1934-04-19) page 1, right-hand column, line 93 -page 2, left-hand column, line 26; figure 1 Α page 1, left-hand column, line 28 - line 28-32, 37,38 30 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance Invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. document published prior to the International filing date but later than the priority date claimed *&* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 7 August 2003 14/08/2003 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

Kroeders, M



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C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT			
Category •	Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.		
A	US 5 392 772 A (ZILBERSHTEIN MICHAEL) 28 February 1995 (1995-02-28) column 2, line 4 -column 3, line 14; figures 2A-4C	1		
X	WO 00 51672 A (DJUPESLAND PER GISLE) 8 September 2000 (2000-09-08) cited in the application	28,31,32		
Α	page 17, line 16 -page 19, line 13	1-11,37, 38		
X	US 5 271 391 A (GRAVES LINDA) 21 December 1993 (1993-12-21) column 3, line 46 -column 4, line 3; figure 1	28-30,37		
X	US 5 099 836 A (LOESCHER THOMAS C ET AL)	28,29		
A	31 March 1992 (1992-03-31) column 4, line 60 -column 5, line 40; figures 1,8	32		
X	US 2 566 806 A (MILLER HUGH A) 4 September 1951 (1951-09-04)	28,37		
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X A	WO 98 53869 A (KELDMANN ERIK; KELDMANN TROELS (DK); DIRECT HALER A S (DK); PELAEZ) 3 December 1998 (1998-12-03) page 10, line 34 -page 11, line 6; figure	1-6,13,		
,	4 page 12, line 28 -page 14, line 5; figures 11-13	28-32, 37,38		

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-15

A nasal delivery device comprising:
A) first and second nosepiece units
B) at least one substance supply unit
C) a valve unit
(selective supply of substance)

2. Claims: 28-32

A nasal delivery device comprising:
B) at least one delivery unit (= substance supply unit?)
D) a gas supply unit (supplying gas flow)

3. Claims: 37, 38

A nasal delivery device comprising:
B) at least one delivery unit (= substance supply unit?)
E) a gas supply unit
(additionally extracting air)

4. Claims: 41-47

An interface member comprising:
A) at least one nosepiece
F) a mouthpiece
(providing exhalation triggering)

INTERNATIONAL SEARCH REPORT

national application No. PCT/IB 03/01557

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)	
This international Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:	
1. X Claims Nos.: 16-27, 33-36, 39, 40 because they relate to subject matter not required to be searched by this Authority, namely: Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy	
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:	
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).	
Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)	
This international Searching Authority found multiple inventions in this international application, as follows:	
see additional sheet	
As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable daims.	
2. X As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.	
3. As only some of the required additional search fees were timely paid by the applicant, this international Search Report covers only those claims for which fees were paid, specifically claims Nos.:	
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:	
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.	



Inte nal Application No PCT/IB 03/01557

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